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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,928	06/21/2001	Tatsuo Ozaki	4041K-000023	6210

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HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

PATEL, NIHIR B

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 04/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/886,928

Applicant(s)

OZAKI ET AL.

Examiner

Nihir Patel

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 2,4,6,8 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,7,9 and 11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-10 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Specification

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,3,5,7,9, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 1, there is insufficient antecedent basis for limitations “the header tanks”, “the mounting members”, and “the longer side wall surface”.

Referring to claim 3, there is insufficient antecedent basis for limitations “the reinforcements” and “the longer side wall surface”.

Referring to claim 5, there is insufficient antecedent basis for limitations “the reinforcement” and “the header tank”.

Referring to claim 7 and 9, there is insufficient antecedent basis for limitations “the reinforcements” and “the mounting member”.

Referring to claim 11, there is insufficient antecedent basis for limitations “the tubes” and “the header tank”.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Osborn U.S. Patent No. 5,257,662. Referring to claim 1, the applicant claims a heat exchanger having mounting members to which a blower is attached, comprising a plurality of metallic tubes through which fluid flows (Osborn discloses a heat exchanger assembly that comprises a plurality of metallic tubes (16) through which fluid flows. Refer to column 4 lines 1 through 5.), and a pair of

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metallic header tanks of a rectangular cross section communicating with the plurality of tubes; the header tanks being arranged at lengthwise opposite ends of the tubes and extending perpendicular to the lengthwise direction of the tubes (Osborn discloses a heat exchanger assembly that comprises a pair of metallic header tanks of a rectangular cross section (22) communicating with the plurality of tubes (16); the header tanks (22) being arranged at lengthwise opposite ends of the tubes (16) and extending perpendicular to the lengthwise direction of the tubes (16). Refer to figure 1.), wherein the mounting member are secured to a longer side wall surface of the header tank (Referring to figures 1,2, and 3 in Osborn's invention, it clearly shows that the mounting member (40) are secured to a longer side wall surface of the header tank (22), and reinforcements are provided in the mounting members on the sides to be in contact with the longer side wall surface, for strengthening the longer side wall surface (Osborn clearly states that in order to provide for securing the header assembly components together in heavy duty applications, such as heavy trucks applications, each tank 22 preferably includes an as-cast extension 40 which contains mounting holes or as-cast indentations for drilling mounting holes identified as 42. Refer to column 4 lines 41 through 47.).

Referring to claim 3, the applicant claims that the reinforcements are provided in the manner that each of the reinforcements extends from a middle point of the longer side wall surface in the longer side direction towards the opposite sides along the longer side direction (Osborn discloses a heat exchanger assembly that comprises reinforcements (40) that are provided in the manner that each of the reinforcements extends from a middle point of the longer side wall surface in the longer side direction towards the opposite side along the longer side direction. Refer to figure2 1 and 2.).

Referring to claim 5, the applicant claims that the reinforcement has a tapered section so that a cross-sectional area of the reinforcement increases as approaching the wall surface of the header tank (Osborn discloses a heat exchanger assembly that comprises reinforcements that has a tapered section so that a cross-sectional area of the reinforcement increases as approaching the wall surface of the header tank. Refer to figures 1 and 2.).

Referring to claim 7, the applicant claims that the reinforcements and the mounting member are integrally formed (Referring to figures 1 and 2 in Osborn's invention, It clearly shows that the reinforcements and the mounting member (40) can be integrally formed.).

Referring to claim 11, the applicant claims that the tubes are connected to the header tank on a shorter side wall thereof (Referring to figures 1 and 2 in Osborn's invention, It clearly shows that the tubes (16) are connected to the header tank (22) on the shorter side wall thereof.).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osborn U.S.

Patent No. 5,257,662 in view of Nishishita et al. U.S. Patent No. 5,30,326.

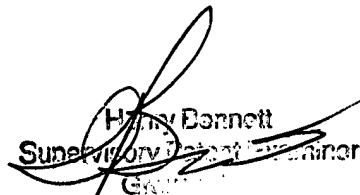
Osborn discloses the applicant's invention as claimed with the exception of providing reinforcement and mounting members that are formed separately from each other and then brazed for incorporating with each other.

Nishishita discloses expansion valve mounting member that provides reinforcement and mounting members that are formed separately from each other and then brazed for incorporating with each other. Refer to figures 2,3,4, and 5. Therefore it would have been obvious to modify Osborn's invention by providing reinforcement and mounting members that are formed separately from each other and then brazed for incorporating with each other in order to provide a stronger mounting member.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Nihir Patel whose telephone number is (703) 306-3463. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful the examiner supervisor Henry Bennett can be reached at (703) 308-0101.


Henry Bennett
Supervisory Patent Examiner

NP
March 26, 2002